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| APPLICATION NO.                  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------|-------------|----------------------|---------------------|------------------|
| 09/728,697                       | 12/01/2000  | Timothy V. Stagg     | 54186USA4C.017      | 5522             |
| 32692                            | 7590        | 03/25/2004           | EXAMINER            |                  |
| 3M INNOVATIVE PROPERTIES COMPANY |             |                      | MADSEN, ROBERT A    |                  |
| PO BOX 33427                     |             |                      | ART UNIT            | PAPER NUMBER     |
| ST. PAUL, MN 55133-3427          |             |                      | 1761                |                  |

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/728,697             | STAGG ET AL.        |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Robert Madsen          | 1761                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on January 9, 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-11,13-18,20-27,29-33,35-39,41,42 and 44-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-11,13-18,20-27,29-33,35-39,41,42 and 44-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 9, 2004 has been entered. Claims 1,2,4-11,13-18,20-27,29-33,35-39, 41,42,44-52 remain pending in the application.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,2,4-8,10, 11,13,14, 17,18,20,21-24,26,27, 29,30,35-39, 41,42,44-48,51,52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Underwood et al. (US 3179326) in view of Osborn (US 4397703).

4. Regarding claims 1,2,5,8,10, 13,14, 17,18,21,24,26,29,30,35-39, 41,42,45,47,48,51,52, Underwood et al. teach commercial gum or cigarettes packages wrapped in cellophane are cleanly tearable with conventional tearable tapes, but these

wrappers, which are notoriously well known to conform to the same of an article as recited in claims 35 –37,41,51, were not replaceable by tear resistant polyethylene, or specifically LDPE film-based wrappers, because LDPE films were not cleanly tearable using conventional tearable tapes. To solve the problem of opening the enclosed region formed by a LDPE-based film in commercial packages, as recited in claims 5,21, 45, and thus substituting LDPE based films form cellophane, Underwood et al. teach applying a single tearable tape, as recited in claims 14,30, of uniaxially oriented polypropylene, or a tensilized PP as recited in claims 10,26, either above or below the surface of a LDPE film as recited in claims 8,24,47,48 that includes a central portion with a tab and two longitudinal portions on either side of the central portion that remain attached to the surface of the LDPE film in order to guide the central portion to cleanly remove the underlying unweakened portion of LDPE, as recited in claims 1,13, 17,29,38,52 in the normally non cleanly tearable LDPE film as recited in claims 2, 18,42 (Column 1, lines 10-37 and 45-70, Column 3line 69 to Column 4, line 21, Column 6, lines 46-52, Column 7, line 50 to Column 8, line 51, and Figures 2,3,5). Underwood et al. only differ from the claims in the recitation of the particular puncture-propagation tear resistance (PPT of at least 20 N/ply) of LDPE films used in commercial packaging that would desirably replace cellophane, as recited in claims 1,17,38.

5. Osborn is relied on as evidence of the conventional LDPE films used in mercantile packages (i.e. commercial bags, Column 1, lines 1-25). Osborn teaches conventional polyethylene film used for commercial packages have a PPT of 48.9 N/ply or 97.9 N/ply (i.e. 11 and 22 lbf), depending on their thickness (Columns 19 and 20,

Example 7 and Table 2). Therefore it would have been obvious to modify Underwood et al. and select an LDPE film of at least 20 N/ply, since Underwood et al. teach a tape suitable for cleanly tearing an LDPE film, with the intention that the LDPE can be used for enclosing commercial goods and Osborn teaches conventional LDPE films used to enclosed commercial goods have a PPT value of at least 20 N/ply. Thus, one would have been substituting one LDPE film for another for the same purpose: enclosing commercial goods.

6. Regarding claims 4,20, and 44, Underwood et al. teach LDPE is more flexible and more extensible than cellophane, which tears easily and leaves smooth edges, and consequently forms erratic wandering tear path (Column 1, lines 15-30). In other words, LDPE exhibits stretching before tearing.

7. Regarding claims 6,7,22,23 and 46, Underwood et al. teach the tape is suitable for opening packages made from polyethylene, LDPE, HDPE and other thermoplastic films., with the intention of the package containing a commercial item (Column 1, lines 10-34,Column 8, lines 43-49). Osborn teaches commercial packages made from LDPE have the conventional PPT of 48.9 N/ply or 97.9 N/ply. However, Underwood et al. are silent in teaching using multilayer films with a first layer of polyethylene and a second layer of polypropylene. However, to modify Underwood et al. and select any particular thermoplastic multilayer material would have been an obvious matter of design, *depending* on the particular PPT of the multilayer film selected since Underwood et al. teach a tape suitable for opening conventional polyethylene, or LDPE, films with the intended use in commercial packages and Osborn teaches conventional commercial

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LDPE-based packages are known to have a PPT of 48.9 N/ply or 97.9 N/ply. One would have been substituting one conventional commercially acceptable thermoplastic film for another.

8. Regarding claims 11 and 27, Underwood et al. teach forming the tape from a 2 inch roll (Examples in Column 5), and although silent in teaching any particular width *applied* to the package, it would have been obvious to select a width of at least 8mm since Underwood et al. teach forming the tape from a 2 in. wide roll. Furthermore, to select any particular width less than 2 inches would have been an obvious matter of choice, depending on the desired tear size since the central portion of the tape is utilized to remove the film from the package.

9. Regarding claims 33 and 39, Underwood et al. teach replacing wrappers surrounding chewing gum packages with LDPE, but is silent in teaching not an edible item or food *per se*. However, once it was known to substitute LDPE wrappers with tearable tapes for cellophane wrappers for the conventional chewing gum package, to make such a substitution on a food package would have been an obvious matter of design choice depending on the type of outer wrapper desired since, as taught by Underwood et al., LDPE wrappers are more flexible and more difficult to shear (Column 1, lines 10-34) and one of ordinary skill in the art would recognize the packaging requirements of chewing gum would be shared with edible candies.

10. Claims 9 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Underwood et al. (US 3179326) in view of Osborn (US 4397703) as applied to claims

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1,2,4-8,10, 11,13,14, 17,18,20,21-24,26,27, 29,30,35-39, 41,42,44- 48,51,52 above,  
further in view of Hodson et al. (US 6316036 B1).

11. Regarding claims 9 and 25, although Underwood et al. teach utilizing an outer film in combination with a commercial product such as chewing gum and a tear tape attached to the interior surface of the film. Underwood et al. are silent in teaching including indicia such that the tape does not obstruct the indicia. Examiner takes official notice that it was notoriously well known to incorporate indicia throughout the entire interior surface or exterior surface, or any surface in between, of a film enclosing a commercial package, such as chewing gum, to communicate product information or packaging information to the consumer. Hodson et al. are relied on as evidence of the conventional commercial package utilizing an interiorly attached tear tape that comprises an ink/print layer throughout an internal the entire film, and thus indicia would be opposite, but not obstructed by the tear tape attached to the interior surface (Column 2, line 57 to column 3, line 28). Therefore, to include such indicia on the film of enclosing the chewing gum package of Underwood et al. above the tape applied to the interior surface such that the tape not obstruct the view of such indicia from the exterior surface, would have been an obvious matter of design choice, since it was notoriously well known in the art to include to include an indicia on a commercial product package to communicate product information or packaging information to the consumer and it was known to include an entire internal indicia layer within the film such that a tear tape attached on the interior surface of the film would not obstruct the indicia. One would have been substituting one conventional commercial package film for another.

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12. Claims 15,16 , 31,32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Underwood et al. (US 3179326) in view of Osborn (US 4397703) as applied to claims 1,2,4-8,10, 11,13,14, 17,18,20,21-24,26,27, 29,30,35-39, 41,42,44- 48,51,52 above, further in view of Kim (US 5203634).

13. Regarding claims 15,16 , 31, and 32, Underwood et al. teach applying the tape having a removable central portion to either the inner or outer surface of the film (e.g. Figures 2 and 5) However, Underwood et al. are silent in teaching a tearable strip that is internally tearable mounted on *both* the exterior and interior of the film or that the tape has a cover tape on a surface opposite the tape. Kim also teaches flexible containers using tapes with pull tabs and removable central portions to tear an opening in the container. Kim is relied on as evidence of the conventionality of internally tearable portion and guides on both the interior and exterior of a given container wall, wherein one of the many advantages is the enhancement of tear opening feature (See Column 2, lines 19-25, Column 8, lines 11-27, Column 8, lines 60-65, Figures 8,19 and 20). It also follows that the exterior tape would be a cover tape on the surface opposite the interior tape. Therefore, it would have been obvious to modify Underwood et al. and combine both embodiments taught by Underwood et al. such that the package had both an internal and external tape, and thus a cover tape on the surface opposite the internal tape, wherein the central portions are removed together since Kim teaches this combinations would lead to an enhancement of the tear opening feature. One would have been substituting one type of tape arrangement (i.e. single sided) for another for the same purpose: forming a tear opening in a flexible package using a tearable tape.



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14. Claims 49 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Underwood et al. (US 3179326) in view of Osborn (US 4397703) as applied to claims 1,2,4-8,10, 11,13,14, 17,18,20,21-24,26,27, 29,30,35-39, 41,42,44- 48,51,52 above, further in view of Zurawski et al. (US 5885630).

15. Underwood et al. teach using polyethylene films, such as LDPE, for enclosing chewing gum packages, but are silent in teaching any shrink-wrapping or skin packaging.

16. Zurawski et al. teach examples of conventional forms polyethylene wrappings for gum packages include skin packaging (e.g. blisters packs) and shrink wrap (Column 3, lines 1-25). Therefore it would have been obvious to modify Underwood et al. and utilize the polyethylene wrappers in any conventional form known to be associated with commercial gum package wrappers, such as shrink wrapped or skin packaging, since one would have been substituting one conventional gum package wrapper form for another.

### ***Response to Arguments***

17. Applicant's arguments are directed to the art presented in the Office action mailed September 9, 2003 in light of the currently amended claims. The arguments have been considered but are moot in view of the new grounds of rejection, which were necessitated by the amendment.

**Conclusion**


18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Underwood et al. (US 3187982) and Rosen (US 2606655) also teach a tearable tape with a removable central portion.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Madsen whose telephone number is (571) 272-1402. The examiner can normally be reached on 7:00AM-3:30PM M-F.

20. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

21. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert Madsen  
Examiner  
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